



Rethinking Arctic sustainable development agenda through indigenizing UN sustainable development goals

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ABSTRACT

The year 2020 has urged Humanity to rethink the sustainable development agenda. The COVID-19 pandemic rearticulated the gaps in implementing the Sustainable Development Goals (SDGs) to benefit remote regions and their populations including Arctic Indigenous Peoples. In this brief communication, we want to draw attention to the need of reshaping UN SDGs in light of the 'new normal' to promote sustainable development of Arctic Indigenous communities. The UN Agenda 2030 sets priorities that have relevance to the Arctic, with its rapidly changing environmental and social systems that are interlinked to other parts of the globe. Successful implementation of SDGs in the Arctic can only be accomplished through an open and pluralistic dialog among global and Arctic stakeholders with the engagement, equal partnership, and under the guidance of the Arctic Indigenous Peoples. This process, we argue, could start by revising the existing 17 goals and creating five new ones (Sustainable Governance and Indigenous Rights, Resilient Indigenous Societies, Livelihoods and Knowledge systems, Life on Ice and Permafrost, Equity and Equality in Access to Natural Resources, and Investment in Youth and Future Generations) that represent Indigenous People's knowledge and aspirations for sustainable development. By indigenizing SDGs in the Arctic, we will not only build the Arctic's own sustainable development framework but attain greater equity and expand the knowledge base of sustainable development globally.

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Sustainable development in the Arctic

Sustainable development in the Arctic is a goal, process and outcome desired by four million Arctic residents, including diverse Indigenous communities. Arctic Indigenous Peoples have lived and migrated in the Arctic for centuries developing unique technologies of sustainability that rely on life amid permafrost, ice, snow, and cold climate. Though Arctic Indigenous Peoples constitute approximately 10% of the region's population, they have been and remain to be active custodians of this vast territory and its natural resources for millennia (Nuttall 1998).

Sustainable development, in the Arctic context, can be defined as *development that improves health, well-being and security of Arctic communities and residents while conserving ecosystem structures, functions and resources* (Graybill and Petrov 2020). Sustainable development in the Arctic should be understood as a polycentric and decolonial concept that aims to empower Indigenous and local communities to define their own destinies amid the grand challenges they face, such as climate change and globalization.

Engaging Indigenous understandings of sustainability

A prominent way to promote decolonial thinking in the concept of sustainable development is to introduce

Indigenous understandings of sustainability (IPMG 2015; Mastrángelo et al. 2019). These understandings are markedly different from the Western perspective as they rely on contextualization and relatedness rather than on normative universality and analytical separation of humans and environment (Virtanen et al. 2020). Indigenous knowledge emphasizes reciprocity and connectivity and strives to sustain this relationship (Behe et al. 2018). Contextualized, nuanced and multigenerational experience-based interpretation of healthy relationships within interrelated, holistic human-nature systems, produces distinct, localized, place-based, spiritually powerful, yet well-integrated and action-oriented sustainable pathways, which have a proven record of effectiveness throughout the millennia (Berkes 2012; Garnett et al. 2018; McGregor 2014; Todd 2015; Vitranen et al. 2020).

Humans, nonhumans, and nature relations are central to Indigenous understandings of sustainability and they are determined by the surrounding landscapes such as ice and cold waters (Cruikshank 2005; Krupnik and Jolly 2010). This relationship encompasses the obligation to safeguard the territory through everyday spiritual and physical practice and interaction which has been time tested (Stevenson 1996; Basso 1996; Mustonen and Ari Lehtinen 2013). It identifies responsibility, ethics, customary law, and ownership. These values are embedded in Indigenous cultures and languages, which provide

endless teachings on sustainable practices and technologies that could be transmitted between generations. Sharing, reciprocity and cooperation are essential practices that ensure equity and equality in access to resources that are instrumental for sustainability in the Arctic (Howe et al. 2016; Gerkey and Petrasheva 2018). Consequently, indigenized sustainable development would incorporate such elements as sustainable Indigenous governance, resilient livelihoods, equity and stewardship of shared resources, Indigenous rights, sustainable knowledge systems and care for future generations.

The knowledge produced around Indigenous conceptualizations, theories and epistemologies of sustainability, however, is rarely fully engaged in conceiving sustainable development goals and indicators, presenting a fundamental flaw of any such system, particularly in the Arctic (Mistry and Berardi 2016; Johnson et al. 2016), although some regional examples exist (Government of Canada 2019). This flaw is even more striking now, when knowledge and experience of the Indigenous Peoples, who survived multiple epidemics relying on traditional practices, such as isolation on the land, are instrumental in responding to the COVID-19 pandemics (Retter 2020; Petrov et al. 2020; 2020).

UN agenda 2030 and the Arctic

The UN Agenda 2030 sets ambitious priorities that have relevance to the Arctic, with its rapidly changing environmental and social systems. There have been a number of attempts to examine the ways in which SDGs could be applied in the Arctic, including the Arctic Council's and WWF efforts (SDWG 2017; WWF 2018; PRPI 2019), and to describe how the SDGs indicators could be re-casted (Nillson and Larsen 2020). However, these studies did not aim to revise these goals to make them 'Arctic's own.' In particular, they have not tied the SDGs framework with the ways of knowing and living in the Arctic Indigenous communities, and have not looked beyond existing SDGs to render them more Arctic-relevant.

Indigenizing the UN Agenda 2030 in the Arctic

Successful implementation of SDGs in the Arctic can only be accomplished through an open and pluralistic dialog among global and Arctic stakeholders including Arctic Indigenous Peoples as rights-, stake- and knowledge holders, with the engagement, equal partnership, and under the guidance of the Arctic residents. Efforts on indigenizing SDGs have been undertaken by the Indigenous communities throughout the globe providing convincing evidence that sustainability planning is most effective when it is culture-informed, community-led, and place- and value-based (Dockry et al. 2016; Schultz 2020;

Renwick et al. 2020). Indigenous Peoples' Major Group for Sustainable Development (IPMG) relentlessly calls for meaningful action to improve SDGs to meet the needs of the communities (IPMG 2015; 2019; 2020) and align them with the UN Declaration on the Rights of Indigenous Peoples (IPMG 2019). A number of Indigenous-led studies have focused on prioritizing decolonized SDG planning frameworks that coincide with the community priorities and the needs of the Arctic (Riedlsperger et al. 2017; Hudson and Vodden 2020). These Indigenous-run efforts and studies demonstrate that Indigenizing SDGs is necessary for the Arctic as it is needed in other Indigenous homelands (Yap and Watene 2019). This can be accomplished by revising the existing 17 goals and creating new ones, if the 17 fall short in representing Indigenous People's knowledge and aspirations for sustainable development.

17 + 5: Revising the UN SDGs framework in the Indigenous Arctic

While SDGs are relevant and important for the Arctic (Korkina 2018; PRPI 2019; Retter 2020), they fall short in encompassing sustainable development perspectives and aspirations of Arctic Indigenous Peoples and other Arctic stakeholders (Mazurov et al. 2018). In fact, only a few Goals specifically mention the Indigenous Peoples (e.g. Goals 2 and 4). Thus, both goals and indicators have been deemed by the Indigenous Peoples insufficient to provide an assessment of their status in respect to SDG targets, capture the gap with the non-Indigenous majority and account for Indigenous rights, knowledge and customs (IPMG 2015). Arctic Indigenous leaders report at multiple high-level meetings that their communities are not only left behind, but they are pushed behind (IPMG 2020). In order to improve the life in Arctic communities, there is a need to revise SDGs with the aim to rearticulate 17 existing goals and develop additional goals specific to the Arctic. Our recommendation is to focus on objectives and indicators relevant to the Arctic that reflect the region's own needs and its special standing in the global system.

Making 17 SDGs Arctic's own

SDGs could be improved through a holistic approach, based on respectful multifaceted nature-human interactions pursued by Indigenous communities. These relationships are not based on a capitalistic profit-oriented approach but are rooted in the non-exploitative means of living. For example, in addressing no poverty, zero hunger, good health and well-being, life on land and below water (SDGs 1, 2, 3, 14, 15) positive effect on the well-being of the Arctic communities could be achieved by recognizing the importance of traditional subsistence practices, such as hunting, fishing, and gathering (ICC 2020; Hossain et al. 2020), improving policies that ensure

access to these vital to the Indigenous Peoples practices, and revising the terms for industry operation to protect Arctic environment (Mazurov et al. 2018; Retter 2020). For example, the current SDG indicators suggest that zero hunger can be achieved through sustainable agriculture; however, in advancing sustainable development in the Arctic, SDGs cannot always be measured in monetary value and they are intricately connected to the well-being of the environment, lands, waters, and are much dependant on reciprocal human-nature relations.

Equitable access to quality education (SDG 4) remains a key concern for the Indigenous Peoples. Arctic Indigenous communities remain behind in access to quality education due to remoteness and poor infrastructure (Hirshberg et al. 2014). Also, Arctic Indigenous communities maintain epistemologies that often do not fit within the Western paradigm of education (Barnhardt and Kawagley 1998). While Arctic states widely offer education based on Western knowledge systems there is commonly little or no recognition of Indigenous knowledges, languages, and Indigenous pedagogies within mainstream education. Unique examples of successful incorporation of Indigenous science in educational curriculums from Inuit communities, Indigenous Peoples of the Russian North, and Saami from Scandinavia (Goldbach 2000; Belianskaia 2016; Seurujärvi-Kari and Kantasalmi 2017) call for wider inclusion of culturally informed and land-based education in the Indigenous languages.

If we want to make human settlements in the Arctic inclusive, safe, resilient and sustainable (SDG 11), special attention should be drawn to building infrastructure that meets the needs of remote communities and responds to rapid climate change (ITK 2019). For the Arctic Indigenous Peoples sustainable living in a settlement, as well as on the land, is closely linked to the health of surrounding hunting, fishing, gathering, ceremonial, and sacred grounds (SDGs 3, 14, 15) (Retter 2020). In this regard, there is a need to take collective responsibility to prevent pollution and destruction of such territories and ensure respect and protection to the places of special cultural, spiritual and harvesting value. This could be achieved through granting legal control over lands and waters where such places are located to Indigenous communities – the guardians of their ancestral territories (Mazurov et al. 2018). There is also a need to engage Indigenous knowledge in responding to environmental and health crises, such as climate change (SDG 13) and COVID-19 (SDG 3) implying a holistic approach of well-being (Retter 2020, ICC 2020).

Equitable partnering for sustainability with the Indigenous Peoples is a must under SDG 17. In particular, to achieve SDGs serious investments are required into capacity building of the Indigenous communities and Indigenous Peoples institutions to

establish a baseline for SDGs implementation in the Arctic (ITK 2019; Retter 2020).

Five new SDGs for the Indigenous Arctic

Indigenous visions of sustainability lay the foundation for resilient social-ecological and related Indigenous knowledge systems that must be engaged to inform sustainable development. It is imperative that these visions of sustainability are included and emphasized in the SDGs framework in the Arctic. Along these lines, reports of the Indigenous Peoples organizations, policy documents and academic literature suggest a number of key priorities. Based on these sources and discussions with Indigenous participants at the two workshops ('Agenda 2030 from the Arctic Perspective' side event (UNPFII 17, April 2018) and 'Indigenous Self-governance and SDGs' workshop (ARCTICenter, February 2019)), we envisage five additional, Arctic-specific SDGs, alongside with rethinking the existing 17 goals (Figure 1).

SDG 18: Sustainable Governance and Indigenous Rights. Recognition of Indigenous rights is of key importance for sustainable governance in the Indigenous communities. The United Nations Declaration on the Rights of Indigenous Peoples outlines foundational measures that need to be undertaken to prevent Indigenous rights violations that push the Indigenous communities behind in attaining the SDGs. In the Arctic Indigenous communities, sustainable development could benefit from traditional governance systems rooted in generational knowledge, consensus and sharing.

SDG 19: Resilient Indigenous Societies, Livelihoods and Knowledge Systems are at the core of sustainable development in the Indigenous communities. Although these attributes are closely related to other SDGs, such as SDG 1, 2, 3, and 11, here the emphasis is on cultural vitality, Indigenous languages, engagement of Indigenous knowledge in decision-making, as well as thriving of Indigenous livelihoods, practices, economies and communities.

SDG 20: Life on Ice and Permafrost highlights the importance of ice and permafrost for the Indigenous Peoples and all Arctic residents. Permafrost and ice, as well as other elements of the cryosphere, determine the characteristics and dynamics of Arctic ecosystems while shaping hunting, fishing, transportation, housing and other life-supporting practices. Sustaining the cryosphere is thus a major part of sustainable development.

SDG 21: Equity and Equality in Access to Natural Resources. In the past, Arctic Indigenous Peoples were often deprived of control and use of natural resources, including minerals, land, animals, or water. In recent decades the situation improved with benefit-sharing and corporate social responsibility becoming more common as a result of local resistance and global pressures. Still, ensuring equal and equitable access

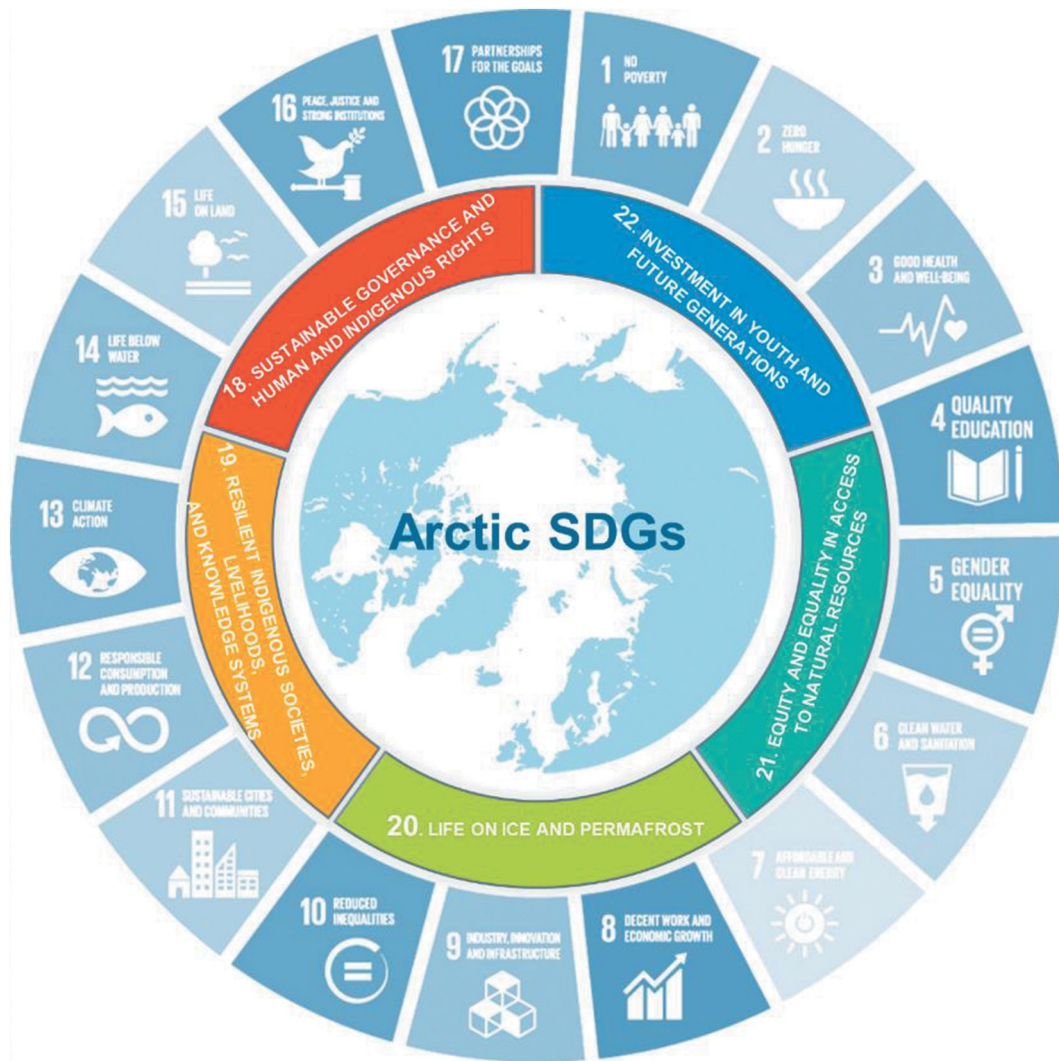


Figure 1. Sustainable development goals in the Arctic: 17 + 5.

to resources, resource governance, decision-making, and benefits distribution remains a primary goal of sustainable development.

SDG 22: Investment in Youth and Future Generations. Youth and elders are special for Indigenous societies. Investing in youth and future generations by connecting young people with the elders to maintain cultural traditions and Indigenous knowledge while advancing Indigenous societies forward is of critical value. SDG 22 goes beyond improving the formal education systems covered by SDG 4. It encompasses broad societal learning, knowledge transfer and holistic skill development that must take place in the appropriate life settings (i.e., on the land, ice, or sea), using Indigenous language and performing traditional activities.

Way forward

By indigenizing SDGs in the Arctic, we will not only improve the relevance, representation and power of these goals but attain greater equity and expand the knowledge base of sustainable development. Using

approaches suggested in this paper, the Arctic Council that includes representatives of eight Arctic states and six Arctic Indigenous organizations, capitalizing on its decades-long expertise in sustainable development and working together with diverse Indigenous and local communities, as well as with scientists and various Arctic stakeholders, can be the driving force in building Arctic's own sustainable development framework. Arctic nations can and must invest intellectual and financial resources in rethinking Arctic SDGs and improving the capacity of Indigenous communities to develop their own priorities, if they are truly committed to fostering sustainability in the Arctic and in the world.

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